

93 wherein said TBR is capable of binding with high affinity to a TBA, said TBA being a substance capable of discriminating between a paired TBR and a TBR having unpaired nucleotides, and further, wherein said BBR is capable of binding with high affinity to a BBA, said BBA being a substance capable of discriminating between a paired BBR and a BBR having unpaired nucleotide,
and wherein said method comprises binding BNAs to the PNA-TNA hybrid and binding labeled BBAs to the BNAs.

Claim 49 (amended):

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54 A method of assembling multimeric [TBAs] target binding assemblies (TBAs) in vivo or in situ which comprises introducing component TBAs into a cell [utilizing a covalently or non-covalently attached protein or bi-layer vesicle or by introducing nucleic acids encoding component TBAs into a cell], said component TBAs each optionally comprising a DNA recognition unit, assembly sequences, asymmetry sequences, nuclear localization signal sequences, and [optional] linker sequences, such that upon proximal binding via the DNA recognition unit of each component TBA to nucleic acid sequences encountered in the nucleus or elsewhere in the cell, component expressed TBAs assemble [via said assembly and asymmetry sequences] into multimeric TBAs.

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Please cancel claims 1-25, 26, 27, 30, 31-41, 37, 38, 43, 45, 46-48, 50, and 51.

Remarks

Claims 26-30, 37, 38, 42-45, and 49 were pending in the subject application. Pursuant to a restriction requirement and subsequent election, claims 1-25, 31-41, 46-48, 50, and 51 had been withdrawn from consideration. By this amendment, claims 1-25, 26, 27, 30, 31-41, 37, 38, 43, 45, 46-48, 50, and 51 have been canceled, and claims 28, 42, and 49 have been amended. Claim 44 has

been indicated to be allowable. Therefore, claims 28, 29, 42, 44, and 49 are before the Examiner for consideration. Favorable consideration of the claims as now presented is earnestly solicited.

The applicants gratefully acknowledge the Examiner's indication that claim 44 is allowable.

Transmitted herewith is a sequence listing under 37 CFR 1.821 through 1.825 for the above-identified patent application. The sequence is submitted in computer readable format and on paper. I hereby certify that the paper and computer readable copies contain the same information and that no new material is added by this submission.

Claims 26-30, 42, and 49 have been rejected under 35 U.S.C. §112, second paragraph. Claims 28, 42, and 49 have now been amended in accordance with the Examiner's helpful suggestions. Specifically, claim 28 has been amended to incorporate all of the limitations of non-elected base claim 12. Claim 42 has also been amended to incorporate the limitations of non-elected claim 1. In addition, the full names for abbreviations such as TBA, TNA, OSA, and BBR used throughout the specification are now recited in the pending claims. Other minor amendments have also been made to lend greater specificity to the claimed subject matter. Claims 26-27 and 30 have been canceled. Therefore, the applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

Claims 26, 27, 30, 37, 38, 43, and 45 have been rejected under 35 U.S.C. §102(b) as being anticipated by Larson *et al.* By this amendment, these claims have been canceled, thus rendering moot this grounds for rejection. These claims are canceled solely for the purpose of expediting prosecution, and the cancellation of these claims should not be taken to indicate the applicants' agreement with, or acquiescence in, the rejections of record.

The applicants believe that, in view of the amendments to the claims and the above remarks, the current claims are now in condition for allowance. Such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 or 1.17 as required by this paper to Deposit Account 19-0065.

The applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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DRS/jc

Attachments: Petition and Fee for Extension of Time; Sequence Listing on paper; Sequence Listing on computer readable format